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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/764,202	RAFIE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sudhanshu C. Pathak	2634	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to December 21<sup>st</sup>, 2005.
2. ☒ The allowed claim(s) is/are 25-36 & 42 and re-numbered as claims 1-to-13 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>Jan. 19<sup>th</sup>, 2006</u>.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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### DETAILED ACTION

1. Claims 25-36 & 42 are pending in the application.
2. Claims 1-24, 37-41 & 43 have been canceled.

### EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John P. Darling on January 19<sup>th</sup>, 2006.

- In order to avoid a 112 2<sup>nd</sup>, Paragraph Rejection, the claims have been amended in the following manner:
  - In Claim 25, line 6 **replace**  
"the pilot symbols" **with**  
.....the equalized pilot symbols.....
  - In Claim 25, line 11 **replace**  
"the same link" **with**  
.....a link.....
  - In Claim 26, lines 1-2 **replace**  
"further comprising: a memory circuit" **with**  
.....wherein the memory is a Random Access Memory (RAM), .....
  - In Claim 30, line 2 **replace**

"to the equalizer to" **with**

.....to the first equalizer.....

- In Claim 31, line 2 **replace**

"to the equalizer to" **with**

.....to the first equalizer.....

- In Claim 32, line 2 **replace**

"to the equalizer to" **with**

.....to the first equalizer.....

***Allowable Subject Matter***

4. Claims 25-36 & 42 and re-numbered as claims 1-to-13 respectively are allowed.
5. Claims 25-36 & 42 and re-numbered as claims 1-to-13 respectively are allowable over the prior art of record because the cited references do not contain the specified limitation of a carrier phase recovery system comprising: a first equalizer configured to equalize a present burst of data using equalizer weights from a previous burst of pilot symbols and data symbols, the present burst of data including pilot symbols and data symbols; a carrier phase recovery unit which recovers phase for the present burst of data using the equalized pilot symbols of the present burst; a mixer combining a delayed version of the present burst and the recovered phase to produce a phase-error compensated signal; and a second adaptive equalizer which equalizes the phase-error compensated signal to produce an equalized output signal and provides next burst equalizer

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weights to a memory to be timely applied to the first equalizer for equalizing a next burst of data on a link.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042
- The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak

  
CHIEH M. FAN  
SUPERVISORY PATENT EXAMINER